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**METHOD AND SYSTEM FOR ORGANIZING IMAGES**

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**METHOD AND SYSTEM FOR ORGANIZING IMAGES**

**CROSS REFERENCE TO RELATED APPLICATIONS**

Sub A ~~U. S. Serial No. \_\_\_\_\_, filed, \_\_\_\_\_, entitled "A KIT FOR ORGANIZING A PLURALITY OF IMAGES"; Docket No. 80369/F-P.~~

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**FIELD OF THE INVENTION**

This invention relates to the field of image capture, and in particular to a system and method for organizing images obtained from a plurality of image retaining and/or capturing devices.

**BACKGROUND OF THE INVENTION**

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Photographic services including image digitization, digital image storage and network access to digital image files and distribution of digital image files are currently provided by network photoservice providers such as the KODAK PhotoNet™ Online service available on the Internet at

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http://kodak.photonet.com. To use this system, the photographer checks a box on a photoprocessing envelope indicating she would like to receive this service. The photofinisher processes the film, scans the film to produce digital images, and uploads the digital images to the network photoservice provider via an FTP (file transfer protocol) site through an Internet server. The network photoservice provider receives the digital images and stores them as image files in a mass storage device such as a Sun ultra 250 mass storage hard drive connected to an internet server.

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The network photoservice provider assigns the image file a roll ID number, and an OwnerKey which functions as a location indicator and password so that the photographer can access the image file over the Internet, and sends the roll ID number and OwnerKey back to the photofinisher. The photofinisher prints a receipt listing the roll ID number, and an OwnerKey and returns the receipt along with the printed photographs to the photographer.

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The photographer then accesses the network photoservice provider from an Internet capable personal computer, supplying the network photoservice provider with her e-mail address, personal password, roll ID number and

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Figure 1 displays 12 histograms, labeled  $x_0$  through  $x_{11}$ , showing the distribution of the number of non-zero elements in the vector  $x_k$ . The x-axis represents the number of non-zero elements (0 to 10), and the y-axis represents the count (0 to 10). The distributions are roughly bell-shaped and centered around 5, with the peak count increasing from 10 at  $x_0$  to 12 at  $x_{11}$ .

Another desirable feature of such a system according to the present invention is the ability to organize the digitized images into an organizational structure in part defined by non-picture data known as meta data which is associated with each individual picture.

5                    Thus, there is a need to provide a method and system for organizing image orders and/or images for a particular customer. The present invention provides an improved method and system whereby images can be automatically and easily organized in accordance with pre-set parameters.

### SUMMARY OF THE INVENTION

10                   The foregoing and other objects, features and advantages of the invention will be apparent from the following more particular description of the preferred embodiment of the invention illustrated in the accompanying drawings.

                    In accordance with one aspect of the present invention there is provided a method for organizing a plurality of images obtained from a defined  
15                   source, comprising the steps of:

*Sub C17*                   providing a database for storing digital images;  
*Sub C27*                   providing at least one image to the database; and  
*Sub B27*                   automatically providing a product with respect to the at least one image after reaching a predetermined criteria.

20                   In accordance with another aspect of the present invention there is provided a system for organizing a plurality of images obtained from at least one image retaining device each having a unique ID, comprising:

*Sub B37*                   a computer having database for storing digital images and a management section for managing customer orders and the stored digital images,  
25                   the management section capable of receiving and storing the unique ID and registering the at least one image retaining device to a customer, the computer associating a particular goods and/or services to images obtained from the at least one image retaining device.

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providing a plurality of discrete image retaining devices, each

providing a first group of the image retaining devices;

forwarding the ID for each of the image retaining devices in the group to database of a network photoservice provider for storage.

~~677 In accordance with still another aspect of the present invention there is provided a system for organizing images obtained from a group of a plurality discrete image retaining devices, each image retaining device having a unique ID, comprising:~~

15 a computer having database for storing digital images and a management section for managing customer orders and the stored digital images, the management section capable of receiving and storing the unique ID of the group of the plurality of image retaining devices and registering the group to a customer, the computer associating a particular goods and/or services to images obtained from the group of plurality of image retaining devices.

In accordance with another aspect of the present invention there is provided a method for organizing a plurality of images obtained from an image source, comprising the steps of:

providing a database for storing of digital images;

providing a plurality of discrete image retaining devices in a

25 package, each image retaining device having a unique ID;

forwarding the unique ID of the plurality of image retaining

devices to a database at a network photoservice provider for storage;

sub 36 allowing access to the database to a customer so as to allow registration of the plurality of image retaining devices to the customer.

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Sub B87 allowing access to the database to a customer so as to allow registration of the package ID so that the plurality of image retaining devices are automatically registered to the customer.

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forwarding the unique ID for the plurality of strips of photographic film and package ID to a database at network photoservice provider for storage; and

5 *Mr 97* allowing access to the database to a customer so as to allow registration of the package ID so that the plurality of strips of photographic film are automatically registered to the customer.

In still yet another aspect of the present invention there is provided a system for organizing a plurality of images obtained from a plurality strips of photographic film, each of the plurality of strips of film being provided in a discrete film cartridge, each of the plurality of strips photographic film having an unique ID recorded thereon, comprising:

10 *Mr 607* a computer having database for storing digital images and a management section for managing customer orders and the stored digital images, the management section capable of receiving and storing the unique ID of the group of the plurality strips of photographic film and registering the plurality strips of photographic film to a customer using the unique ID.

*Mr C 97* In still another aspect of the present invention there is provided a method for organizing images obtained from a at least one image retaining devices, comprising the steps of:

20 providing at least one image retaining devices having a unique ID; obtaining the ID from each of the at least one image retaining device; and

*Mr 617* forwarding the ID for the at least one image retaining to a network photoservice provider for storage.

25 **BRIEF DESCRIPTION OF THE DRAWINGS**

In the detailed description of the preferred embodiments of the invention presented below, reference is made to the accompanying drawings in which:

30 Fig. 1 is schematic diagram of a kit made in accordance with the present invention;

Fig. 2 is a schematic diagram of system made in accordance with the present invention;

Fig. 3a is a diagram of registration screen on a display device of a computer that is used in the system of Fig. 2;

5 Fig. 3b is a diagram of a verification screen on a display device of a computer that is used in the system of Fig. 2;

Fig. 3c is a diagram of an order screen on a display device of a computer that is used in the system of Fig. 2;

10 Fig 3d is a diagram of an order confirmation/verification screen on a display device of a computer used in the system of Fig.2;

Fig. 4 is a schematic diagram of another system made in accordance with the present invention;

Fig. 5 is a schematic diagram of yet another system made in accordance with the present invention;

15 Fig. 6 is a schematic diagram of still another system made in accordance with the present invention;

Fig. 7 is a schematic diagram of another system made in accordance with the present invention;

20 Fig. 8 is a schematic diagram of yet another system made in accordance with the present invention;

Figs. 9a-9b illustrate a registration card to be used in the system of Fig. 8;

Fig. 10 is a plan view of a package containing a plurality of image retaining devices to be used in the system of Fig. 8

25 Fig. 11a is a plan view of a package for holding image retaining devices made in accordance with the present invention; and

Fig. 11b is an enlarged partial view of the package of Fig. 11a illustrating how the individual image retaining device may be held therein.



## DETAILED DESCRIPTION OF THE INVENTION

Referring to Fig. 1 there is illustrated a retail kit 10 made in accordance with the present invention, which can be used for organizing images for a customer. In particular, the kit 10 comprises an image retaining device 12 upon which images may be captured. In the particular embodiment illustrated, the image retaining device 12 comprises a film cartridge 14 containing a strip of photographic film 16 therein upon which images can be captured. The film cartridge 14 is provided with a unique cartridge ID 17 which in the embodiment illustrated is provided in machine readable and human readable form. Once the images have been captured on film 16, the film 16 can be then sent to a photofinisher 68 where the film 16 is developed and the developed images are digitally scanned and sent to an appropriate output device such as a printer for printing of hard copy prints. Alternatively or in addition thereto, the digitally captured images may be sent to an image database or storage bank as discussed later herein. The kit 10 further includes registration card 18 which can be used for identifying the purchasing customer. The registration card 18 can also be used to identify the goods and/or service to be provided as a result of the purchase of kit 10. In the particular embodiment illustrated the registration card 18 includes a universal resource locator (URL) 20 and a registration number 22 which is written both in machine readable language and human readable language. The URL 20 is the internet address that is to be used for registration of the customer with respect to the goods and/or service to be provided as result of the purchase of kit 10. A magnetic strip 23 is also provided on card 18 which can also be read to provide information recorded thereon by an appropriate magnetic strip reader 19 such as disclosed in Fig. 4 discussed later herein. The recorded information can include information relating the goods and/or services purchased and/or any other information provided therewith that may be useful to the customer or other parties involved in providing the related goods and/ or services.

The kit 10 in the particular embodiment illustrated is also provided with an image storage device 24 upon which images may be digitally stored. In

the particular embodiment illustrated the image storage device 24 is a compact disk (CD) which is capable of storing a plurality of digital images. The image storage device 24 may be provided with a label 26 which can include all or some of the information provided on registration card 18 and/or the related goods and/or services to be provided. In the particular embodiment illustrated the label 26 is provided with registration number 22 provided on registration card 18. The CD is provided with a computer software program which when loaded on a computer will allow a user to communicate to a network photoservice provider 34 and also allow a customer to register the image retaining device 12 to the customer. The software may also allow the customer to do other tasks with the network photoservice provider 34. For example, but not limited to, the manipulation and/or sorting of digital images stored at the network photoservice provider 34, the uploading of images, the downloading of images, the ordering of goods and/or services and registration of additional image retaining devices 12 to the customer.

The image storage device 24, in the embodiment illustrated is capable of providing long term storage of the images that have been captured and stored on image retaining device 12. In this regard, the registration card 18 can also be used in identifying additional images obtained from other image retaining devices 12 that are to be associated and stored on image storage device 24.

Referring to Fig. 2 there is illustrated a block diagram showing an image organizing and automatic product delivery network system 28 that may be used for registering of kit 10 so that the appropriate goods and/or services will be automatically provided to the customer. In particular, the network system 28 comprises a computer 30 which can be linked to an internet service provider 32 which allows the computer 30 to be connected to a network photoservice provider 34 through the Internet 36. The computer 30 includes a display device 31 for displaying of images. In the embodiment illustrated display device 31 is a CRT, however, display device 31 may comprise any appropriate display device. In the particular embodiment illustrated the computer 30 is personal computer owned by the customer, however the present invention is not so limited. The computer 30

may comprise a kiosk and/or other computer that is available to the customer which can be connected to the network photoservice provider 34 through Internet 36 or other communication system.

5       The network photoservice provider 34 has a server 35 which is capable of communicating using the Internet 36 and which is connected to a computer 40. Computer 40 includes an image storage database 42 where customer images are stored and a management section 43 for managing customer orders and keeping track of the stored images.

10       The kit 10 may be sold as part of a particular promotion for providing a particular goods and/or service services upon reaching a predetermined criteria. In the particular embodiment illustrated, the kit 10 is sold with a promotion for providing an image storage product containing a plurality of images taken over a pre-selected period of time from a plurality rolls (strips) of photographic film 16. For example, a CD will be provided of a plurality of  
15       images taken over a defined number of different rolls of photographic film and/or which have been taken over the course of a single year. The cost of the goods and/or service may be prepaid with the cost of the kit 10. In system 28 the customer would first register for the particular goods and/or service sold as part of the kit 10. This is accomplished by the customer accessing the URL 20 provided  
20       on registration card 18 using computer 30 via the Internet 36. Once the customer is connected to network photoservice provider 34 associated with the URL 20. The network photoservice provider 34 will cause a registration screen 37 to be displayed on display device 31 of computer 30 as illustrated in Fig. 3a. As can be seen, the registration screen 37 will have various places for providing of  
25       appropriate information needed by the network photoservice provider 34. In particular, the registration screen 37 includes a section 48 for entry of the customer name, a section 49 for entry of the customer address, a section 50 for entry of the customer phone number, a section 52 for entry of the e-mail address for the customer, and a section 54 for entry of registration number 22. In the  
30       particular embodiment illustrated since this registration number is associated with

kit 10, it is possible that the film cartridge ID 17 can be automatically associated with registration number 22. For example, in preparation and selling of the kit 10, the registration number 22 may already have been associated with the film ID and forwarded on to the network photoservice provider 34 by the packager of kit 10, which may be for example the manufacturer of one of the components of the kit 10 or by the retailer of the kit 10. However, in cases where the registration number 22 has not been pre-stored at the network photoservice provider 34, an additional section 56 may be provided on screen 37 for entry of the film cartridge ID 17.

Referring to Figs. 3b 3c there is illustrated a confirmation screen 46 and verification screen 47 that is provided to the customer after receipt and acceptance of the filled registration screen illustrated in Fig. 3a. Once the registration screen 37 has been completed the customer need not do anything further. This is because the kit 10 has already been pre-defined to provide a predetermined goods and/or service upon reaching a predetermined criteria. As previously discussed, in the embodiment illustrated, the kit 10 is designed to provide a plurality of images on a CD. Thus, when an appropriate number of image retaining devices 12 have been provided so as to obtain the required number of images for filling the CD, the CD will automatically be provided to the customer. Since the customer address has already been registered the completed CD is simply shipped to the customer by any desired means, for example, by mail, carrier, etc.. Alternatively, the CD, or other goods or services, may be provided after a predetermined time period has elapsed. For example, the CD would be returned to the customer with all images that have been received within a one year time period. It is of course understood that the predetermined criteria may be selected as desired by the network photoservice provider 34 or selected by the customer at registration or at any other time prior to delivery of the requested goods and/or services. The customer is not limited to the particular goods and/or services that is associated with kit 10.

Referring to Fig 3d, there is illustrated a goods/service order confirmation display screen 39. If goods and/or service have already been associated with the registration number 22, this will be seen on display screen 39. This screen also allows the customer to ask for additional goods and/or services or  
5 change the current order to provide different goods and/or services. As can be seen a variety of goods and/or services may be requested by the customer, for example, but not by way of limitation, ordering of album pages, providing the image on a computer disc, forwarding images to the KODAK PhotoNet™ Online service for forwarding images and/ or goods to third parties, such as friends,  
10 relatives, business associates, create a site event where images from third parties may be shared. There, of course may be an additional cost associated with order changes made by the customer. As also illustrated on screen 37, there may be provided a place for a credit card number against which these new or modified goods and/or services may be charged thereby allowing the customer to be  
15 automatically billed for the goods and/or services requested. In the particular embodiment illustrated the cost of the kit 10 included the cost of providing the fulfilled CD in which case the customer would be charged only for additional goods and/or services requested.

Once the customer has completed the registration process, the  
20 customer may add additional image retaining devices 12 to the associated goods and/or service by simply reconnecting, via the internet, to the network photoservice provider 34 and providing additional film cartridge IDs 17 in the appropriate section 56 as prompted by the computer screen 37. If the customer desires, these additional film cartridges or other image retaining devices may be  
25 ordered through the network photoservice provider 34. When such orders are made, the ID for each of the additional devices can be automatically registered on behalf of the customer. Thus, all the image retaining devices 12 that are to be used for the providing of images on to CD are pre-registered prior to forwarding on to a photofinisher for developing of the images on the image retaining device  
30 12 and for providing any additional services as required by the kit 10. As

discussed later herein, the photofinisher 68 would contact the network  
photoservice provider 34 and access the customer information data section 44 of  
computer 40 to first determine if the film cartridge 14 has been registered and  
what goods or services have been requested through registration. In this regard, it  
5 may be possible that a special code be provided on the film cartridge 14 and/or  
photoprocessing envelope 70 advising that a network photoservice has been  
associated with the particular film cartridge 14. Otherwise, the photofinisher 68  
can simply scan the film cartridge ID 17 number and determine whether or not a  
network photoservice product or service has been registered by the customer.

10 Referring to Fig. 4, there is illustrated a block diagram showing a  
modified network system 58 used in practicing the present invention. System 58  
is similar to system 28 wherein like numerals indicate like parts and operation. As  
previously discussed, the kit 10 provides a single image retaining device 12 that is  
to be associated with the goods and/or service to be provided. A plurality of  
15 different image retaining devices 12 may be associated with a single goods and/or  
services in which case successive image retaining devices 12 must be associated  
therewith. With regard to system 58, a customer would use the registration card  
18 to associate additional image retaining devices 12. When purchasing a second  
or subsequence image retaining device 12 as illustrated in Fig. 4, the film cartridge  
20 14 may be scanned by scanner 62 at the retail establishment for obtaining the film  
cartridge ID 17. Also, a second scanner 19 may be provided for scanning the  
registration card 18 which will allow the customer to be automatically associated  
with that roll of film and registering of the film with that customer. This  
information would be forwarded by a retail computer 66 to an internet service  
25 provider 32 which in turn would forward the information through the Internet 36  
to the network service provider 34. The URL 20 address may be obtained from  
the scanning of the registration card 18. Since there is already an existing file  
associated with the registration number 22, the network photoservice provider 34  
would automatically associate the film cartridge 14 with the service requested by  
30 the customer. The customer would then capture the appropriate images on image

retaining device 12 and forward it to the appropriate photofinisher 68 in a typical photoprocessing envelope 70 whereby appropriate prints of any images captured on the image retaining device 12 may be returned to the customer as is typically done. The photofinisher 68 will have appropriate equipment 73 for processing of the image retaining device 12 and digitally scanning of the images, for example, by scanner 74. The scanned digital information of the images (digital images) is forwarded to photofinishing server 76 and to memory 77 for temporary storage. Then the digital images are sent to a printer 78 for producing of hard copy prints 80 as ordered by the customer. The photofinisher 68 will have an appropriate computer 82 for communicating with the server 76 which can communicate through the internet 36 to network photoservice provider 34. As previously discussed, appropriate information is provided for obtaining the film cartridge ID 17 which can be identified by the network photoservice provider 34. Thus, if the customer presents an order that requires a particular service (i.e. such as providing images taken on a plurality of films 16 over a course of time, as previously discussed) the images will be sent via the Internet 36 to network photoservice provider 34 for storage and for providing of appropriate products or services as required upon reaching the predetermined criteria. In the particular embodiment illustrated, the predetermined criteria is the providing of sufficient images to fill the CD or upon expiration of the one year time period. Therefore, once the network photoservice provider 34 obtains enough images for fulfilling of the request of goods and/or services, a CD containing all the images will be automatically produced and forwarded to the customer. The actual production of the CD may be accomplished by any appropriate concern. In the particular embodiment illustrated the network photoservice provider 34 sends the appropriate information to a fulfillment center 86 which will produce the appropriate CD as required. In the particular embodiment illustrated an image storage device 24 in the form of a CD is provided to the customer at initial purchase. The CD is provided with appropriate computer software, as previously discussed. Also in the embodiment illustrated, the initial CD supplied with kit 10

was sent to the photofinisher 68 in the photoprocessing envelope 70. The supplied CD can be forwarded on to the fulfillment center 86 once where the customer order is fulfilled. It is not necessary that the CD initially supplied be the actual CD used to fulfill the customer order or that the kit 10 be supplied with a CD for  
5 providing the desired goods or service. If desired, the kit 10 may simply state that a CD or other desired goods or service will be provided upon proper registration.

In the particular embodiment illustrated, the CD will typically hold approximately 500 high resolution digital images obtained from about 20 rolls of photographic film, each containing approximately 24 images. Thus, when 20 rolls  
10 have been processed, the images that have been stored at the network photoservice provider 34, the appropriate customer order information and associated digital images are forwarded on to the appropriate fulfillment center 86 for completion of the customer order.

In the particular embodiment illustrated, the predetermined criteria  
15 for providing of the CD is based on a particular number of images being provided by the customer. However, the present invention is not limited to such. For example, if only five rolls of films are processed within a prescribed time period, for example one year, upon reaching the prescribed time period a CD will be produced with whatever images have been obtained for that time period and will  
20 be forwarded automatically to the customer. It is, of course, understood that any predetermined criteria may be used. The particular criteria may be modified by the customer at the time of registration or at any time prior to producing of the CD. The customer can, of course, order any further modification or additional selections for goods and/or services which may or may not result in a charge to the  
25 customer.

In the invention illustrated in Fig. 1, only one image retaining device 12 is provided in kit 10 for starting of the process. However, the present invention is not so limited. Referring to Fig. 5, there is illustrated a block diagram of a system 89 also made in accordance with the present invention. In this  
30 embodiment a plurality of film cartridges 14a-14i are provided in a single package



88 as illustrated. Each of the film cartridges 14a-14i are scanned prior to being filled in package 88 so as to obtain the cartridge ID 17 for each of the film cartridges 14. This information is forwarded to a cartridge registration database 90, wherein the information regarding the cartridge ID 17 for each of the film cartridges 14 placed in package 88 are identified and grouped as a set. The cartridge registration database 90 is accessible through the Internet 36 or other types of communication to the network photoservice provider 34 and to a personal computer 30 of a customer. System 89 operates much in the same way as system 58 described with respect to Fig. 4 like numerals indicating like parts and operation. In system 89, all of film retaining devices 12 within the package 88 can be readily identified by identifying only one of the film cartridges 14 as this information was originally captured as a group. Thus, when all of the film cartridges 14 in package 88 have been sent to the photofinisher 68 for processing and the captured images forwarded to the network photoservice provider 34, a CD containing all of the captured images will be automatically provided by the network photoservice provider 34. In this regard the network photoservice provider 34 would send the stored digital images and customer order directions to a fulfillment center (not shown) where the appropriate goods and/or services are made and sent to the customer. The registration process works much in the same way as previously discussed, however, instead of having the customer registering all of the film cartridges 14 individually, the customer need only provide one ID. Confirmation will be provided by the network photoservice provider 34 with respect to the other film cartridges 14 that are associated therewith as being part of the same group. The customer could then confirm that the actual film cartridges 14 contained in package 88 correspond to the confirmation notice provided by the network photoservice provider 34 to the customer.

While the entire group of film cartridges 14 will be considered a single set, the customer could modify the grouping at registration, or at some later time, by partitioning certain film cartridges 14 to a particular goods or service. For example, but not by way of limitation, the customer could indicate that the

images obtained from film cartridges 14a, 14b and 14c are to be provided as a single group and are to be delivered on a single CD whereas the images from film cartridges 14d, 14e, 14f and 14g are provided on a second CD, and the images obtained from film cartridges 14h and 14i are to be provided on a single computer disk. It is of course to be understood that the customer may select any desired goods and/or service to be associated with any particular grouping or individual film cartridge 14.

Referring to Fig. 6, it is illustrated a block diagram of modified system 91 made in accordance with the present invention. The system 91 of Fig. 6 is very similar to system 89 of Fig. 5 except that the individual film cartridges 14 are not provided in a group packaging. The image retaining devices 12, in this embodiment are individually sold and are grouped as selected by the customer.

Referring to Fig. 7 there is illustrated a block diagram of yet another modified system 93 made in accordance with the present invention. The system 93 of Fig. 6 is similar to that of Fig. 4 except that an additional machine readable package ID 92 is provided on the package 88 for identifying all of the film cartridges 14 provided in the package 88. In this embodiment the cartridge ID 17 is scanned when the film cartridges 14 are in package 88.. The scanned information, the cartridge ID 17 for all of the film cartridges 14 and the package ID 92, is sent on to the registration database 90 as previously discussed. Since there is provided a package ID 92 this can immediately associate all of the individual film cartridge ID 17 provided in package 88. Thus, when the customer registers the film, he need only provide the package ID 92 during registration wherein confirmation of all the individual film cartridges 14 will then again be provided to the customer confirming the actual cartridge IDs 17 of the film cartridges 14 provided to the customer. An advantage of system 93 is that the scanning and grouping of the individual film cartridges 14 may be provided at film packaging or at the retail establishment where the package 88 of film cartridges 14 are actually sold. Thus, the initial package 88 may not be part of an initial program by the film manufacturer or film packager but is entered into by

the retailer. The remaining operation of system 93 would operate in the same manner as system 58 previously discussed.

Referring to Fig. 8 there is illustrated a block diagram in yet of another modified system 95 made in accordance to the present invention. Like  
5 numerals indicating like parts and operation previously discussed. In this embodiment, a film ID 94 is provided on film 16. This information would be provided by the film manufacturer and sent to film registration database 96 which in turn would be sent to a package registration database 98 at a network  
10 photoservice provider 34. A card 96 could also be provided in the package 88 identifying the film ID 94 for of all the film cartridges 14 placed within package 88. This would allow the retailer to scan the card 96 and forward the information on to the network photoservice provider 34. Package ID 99 would be scanned and provided to the package registration database 98. This system would be useful  
15 when the film cartridge 14 does not have a registration number printed on the cartridge, such as with 35 mm film. It is known in the film manufacturing art to write a latent image barcode onto the filmstrip of a 35 mm roll of film during the manufacturing process. Such a barcode can encode the numbers subsequently used to register the film cartridges 14. When submitted for processing, the developed  
20 film 16 can be read by scanner 74 and cross checked against film registration database 96 to determine the appropriate goods and/or services selected. When the customer receives the package 88, he would register the film cartridges 14 by entering the numbers set forth on the card 96 that is provided in the package 88. Then registration service would be provided in much the same manner as previously discussed. While in the particular embodiment illustrated in Fig. 8, the  
25 registration is accomplished by the customer at a personal computer 30, this can be done alternatively by a retail establishment wherein the card 96 is provided within package 88 with a peel off label 97 such as illustrated in Figs. 9a-9b. In the particular embodiment illustrated, a conventional laser is used to write the registration number 22 on the card 18 through the peel off label 97. The laser will  
30 not damage the peel off label 97, but will write on the card 96 as the material of

card 96 absorbs the energy of the laser to form human readable text using a well known technique. Once the peel off label 97 has been removed, for example, by the retailer and/or customer, this information could be entered by the retailer into the system and the card 96 be given or used by the customer for use in identifying the film cartridges 14 that has been entered into the systems. The particular goods and/or services can be entered at the time of registration by the retailer or if desired, on a photoprocessing envelope 70 that is provided with the order at the time of the processing film. Additionally there may be provided on package 88 as shown in Fig. 11a having peel off stickers 87 having the unique ID written in a machine readable form for each film cartridge 14. The back side of the stickers 87 have an adhesive surface for adhering the sticker to the associated film cartridge 14 or photoprocessing envelope 70 used to order processing of the film. Thus, the sticker 87 can be placed on the film cartridge 14 so the photofinisher 68 can automatically read the cartridge ID 17 and determine if it associated with a registered film cartridge 14 and the providing of a particular goods and/or service at the network photoservice provider 34 as previously discussed. Fig.11b illustrates how the film cartridge 14 is mounted to package 88. In particular a pair of tabs 101 which can be easily torn to allow easy removal of film cartridge 14. As can be seen the cartridge ID 17 is placed adjacent the film cartridge 14 containing the strip of film 16 having the associated cartridge ID 17.

Upon registration with a network photoservice provider 34, a customer account is established. Once a customer account is, it is possible to order film directly whereby the film or other products can be automatically sent to the customer and automatically registered for a particular goods and/or services selected by the customer. Thus, for example, the customer need not do anything else other than ordering a film cartridge 14. Referring to Fig. 10, there is illustrated a form by which the film cartridge 14 could be ordered over the Internet 36 and wherein the customer would provide an account number associated with that particular customer. As can be seen, the particular film type and quantity desired may be provided. There also could be provided selections for

automatically registering of this film cartridge 14 with the particular goods and/or services as previously discussed.

In the embodiments previously discussed, registration occurs by use of a personal computer 30 or similar type device. However, the present invention is not so limited. For example, registration by a customer may be accomplished by phone. All that need be provided is a phone number which may be provided on the package for goods and/or services whereby the customer can call and register a particular image retaining device 12. Referring to Fig 10, there is illustrated a block diagram of the process by which phone registration may be accomplished. First, the customer at box 110 calls a registration service. The registration service at box 112 would then retrieve the name and address using caller ID as is typically available today on many phone systems. If the caller ID is blocked out, a voice message would be provided to the customer to enter their account number if they have one using the phone touch pad. If the customer does not have registration number, a registration number will be assigned to the customer. Based on the previous registration, or from the caller ID, information will be provided to the customer to confirm that the name and address is correct at step 114. However, if the name and/or address is incorrect in either steps 114 and 115, the registration process will go to a step 116 where the correct information can be entered by the customer. This can be done by an operator or by punching in the appropriate information on the phone touch pad. Once having established the correct name and address at step 118 the customer would enter the cartridge ID 17 or package ID 92 as appropriately, by using the phone touch pad. Once registration by phone is complete, the collected information is transmitted to the network photoservice provider 34 at step 120. At any time during the operation should assistance be required, appropriate instructions will be provided so that the customer can talk to a live individual for assistance.

In the above description the image retaining device 12 is shown as a film cartridge 14, however the image may be provided in a variety of other formats, for example, from a digital camera, computer disc, flash card, and any

other media capable of providing images which are in digital format or can be converted into a digital format.

The network photoservice provider 34 is illustrated as a separate facility, however the present is not so limited. The network photoservice provider  
5 may be a part of the photofinisher 68 and/or fulfillment center 86. Likewise the fulfillment center 86 may be part of the photofinisher 68 and/or network photoservice provider 34. It is important only that the functions provided by these providers be maintained.

In the detailed description, an ID is provided on the image retaining  
10 device or registration card. It is also possible to provide an ID on the image storage device 24, such as a CD. The manufacturer of the CD can register the ID with network photoservice provider 34. In one embodiment, the ID would be provided in the software on the CD that is used for communicating with the network photoservice provider 34. Thus, when the customer goes to the  
15 photonetwork service provider, the ID on the CD can be used to automatically register the customer and image retaining devices associated with the CD would also be automatically registered. When a package containing a plurality of image retaining device, such as film cartridges, are sold with a CD 24, the customer need only provide his or her name and address for registration. The customer may of  
20 course modify or change and goods and/or services that are to be provided.

It is to be understood that various changes and modifications may be made without departing from the scope of the present invention. The present invention being limited by the following claims.

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2

10.	retail kit	68.	photofinisher
12.	image retaining device	70.	photoprocessing envelope
14a.-14i	film cartridge	73.	equipment
16.	film	74.	scanner
17.	film cartridge ID	76.	server
18.	registration card	77.	memory
19.	magnetic strip reader	78.	printer
22.	registration number	80.	hard copy prints
23.	magnetic strip	82.	computer
24.	image storage device	86.	fulfillment center
26.	label	87.	peel off stickers
28.	network system	88.	package
30.	computer	89.	system
31.	display device	90.	cartridge registration database
32.	Internet service provider	91.	system
34.	network photoservice provider	92.	package ID
35.	server	93.	system
36.	Internet	94.	film ID
37.	registration screen	95.	system
39.	confirmation display screen	96.	card
40.	computer	97.	peel off label
44.	customer info. data section	98.	package registration database
47.	verification screen	99.	package ID
48.	section	101.	tabs
49.	section	110.	box
50.	section	112.	box
52.	section	114.	step
54.	section	115.	step
56.	section	120.	step
66.	retail computer		